



**Electro-Voice®**  
a MARK IV company

## Model DS35

### Dynamic Single-D Cardioid Microphone

#### SPECIFICATIONS

##### Type:

Dynamic

##### Frequency Response:

60 to 17,000 Hz

##### Polar Pattern:

Cardioid

##### Impedance:

150 ohms balanced

##### Output Level:

-60 dB

(0 dB = 1 mW/10 dynes/cm<sup>2</sup>)

##### EIA Sensitivity Rating:

-152 dB

##### Diaphragm:

Acoustalloy® with  
laminated Volumetric dome

##### Case:

Turned steel

##### Finish:

Fawn beige micomatte

##### Dimensions:

184 mm (7.25 in.) long

48 mm (1.875 in.) diameter

19 mm (0.75 in.) shank diameter

##### Net Weight:

261 g (9.2 oz)

##### Cable:

4.6 m (15 ft), 2-conductor,  
shielded, synthetic rubber-  
jacketed with Switchcraft A3F  
connector

##### Accessory Included:

Model 312A clamp

#### Optional Accessories:

Model 313A shock mount

Model 340 security clamp

Model 376 windscreen

Model 381 switch connector assembly

Model 400 desk stand

Model 422 desk stand

Model 423A desk stand

#### DESCRIPTION AND APPLICATIONS

The Electro-Voice Model DS35 is a dynamic Single-D cardioid microphone created specially for professional applications. The Single-D design emphasizes low frequencies when used "close up." Perfect for the exacting needs of high quality sound reinforcement and other professional performer applications where proximity effect or "bass boost" is desired, the DS35 is ruggedly designed and attractively styled. The broadcast painted finish of fawn beige micomatte minimizes glare for camera use.

An exclusive Volumetric-hologram designed diaphragm provides exceptionally wide, linear response at all angles of incidence for extremely high gain-before-feedback in sound reinforcement applications and virtual elimination of off-axis coloration.

The head assembly is shock-mounted in the case by a pneumatic shock absorber which very effectively isolates the transducer assembly from mechanical noises. A blast filter is integral with the microphone to allow close talking without excessive "P-popping"

and also prevents dirt and magnetic particles from accumulating on the diaphragm. The DS35 also employs a Memraflex grille screen that bounces back to retain its shape.

#### USING THE VARIABLE LOW FREQUENCY RESPONSE

The DS35's low frequency response varies with the distance from the sound to the microphone as shown in the response curve (Figure 3). Maximum bass response is produced in close-up use with the microphone one-quarter-inch from the sound source (Figure 3/A). Minimum bass response is experienced at distances greater than 61 cm (24 inches) (Figure 3/C). Useful effects can be created by imaginative application of the variable low-frequency response:

- 1 By working closer to the microphone than might otherwise be natural, the human voice will sound more robust.
- 2 Feedback in a public address system is sustained by reflection of sound into the microphone. For all microphones, as the artist moves closer, the level of his voice (at the microphone) increases and the microphone's signal to the amplifier is increased. For a constant volume of sound from the system, the amplifier gain setting must be proportionately reduced. This

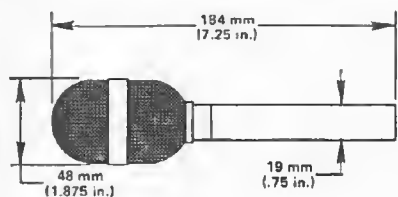


FIGURE 1 — Dimensions

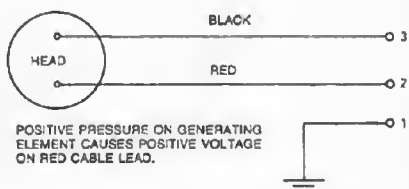


FIGURE 2 — Wiring Diagram

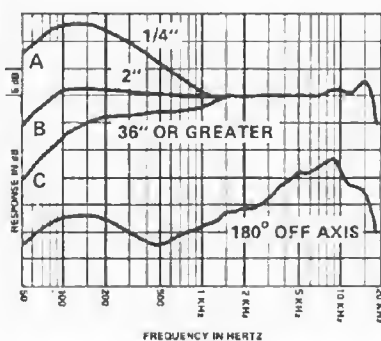


FIGURE 3 — Frequency Response

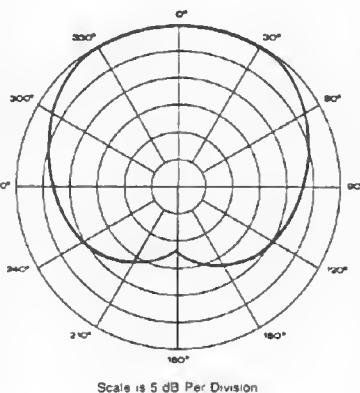


FIGURE 4 — Polar Response

results in a reduction of the system's sensitivity to reflected sound, hence a reduction of the tendency to feedback.

The variable low-frequency response of the DS35 provides a further feedback-reducing advantage in close-talking applications. At one-quarter-inch, low-frequency response is greatly enhanced, while response to distant sound (as from sound system loudspeakers) is unaffected. The result is a reduced tendency to feedback, over and above that provided by the cardioid directional characteristic alone.

In short, system sensitivity reduction because of close working, added to the advantage resulting from the bass boosting low-frequency characteristic of the DS35, makes this instrument an exceptionally effective tool for stage and nightclub use.

- For musical pickup, the variable bass response can be utilized to achieve "clean" bass pickup at distances of 305 cm (12 in.) or more. By moving the DS35 to a few inches from the instrument, bass will be increased.

#### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a cardioid dynamic type. Frequency response shall be 60 to 17,000 Hz, specially shaped above 1000 Hz to maintain presence for vocal and musical pickups, and below 1000 Hz shall vary inversely with distance. Response at the front of the microphone at 1000 Hz shall be nominally 18 dB greater than response at the rear.

The microphone shall have an output of -60 dB (0 dB = 1 mW/10 dynes/cm<sup>2</sup>). The microphone shall have an Acoustalloy diaphragm with laminated Volumetric dome. An integral blast filter shall be provided. A 4.6 m (15 ft), two-conductor shielded, synthetic rubber-jacketed cable with Switchcraft A3F connector installed in the

microphone end shall be provided. Low impedance connections shall be balanced line configuration.

The case shall be machined steel. Dimensions shall be 184 mm (7.25 in.) long, 48 mm (1.875 in.) diameter, 19 mm (0.75 in.) shank diameter, and weight shall be 261 g (9.2 oz). A Model 312A clamp shall be provided. Finish shall be fawn beige micomatte.

The Electro-Voice Model DS35 is specified.

#### WARRANTY (Limited)

Electro-Voice Professional, PL & BK Series Microphones are guaranteed against malfunction from any cause for a period of two years from date of original purchase. Also, these microphones are guaranteed without time limit against malfunction in the acoustic system due to defects in workmanship and material. Any active electronics incorporated in the microphone are guaranteed for three years from date of original purchase for parts and labor against such malfunction. If such malfunction occurs, microphone will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not extend to finish, appearance items, cables, cable connectors, switches, or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Electro-Voice or its authorized warranty service agencies will void this guarantee. A list of authorized warranty service centers is available from Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (AC/616-695-6831); or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (AC/209-651-7777). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107.

Specifications subject to change without notice.



**ELECTRO-VOICE, INC., 600 Cecil Street, Buchanan, Michigan 49107**

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